

## Handout

### Physical Urticarias

#### Mario Geller, MD, MACP, FAAAAI

Physical urticarias consist in a group of dermatosis characterized by mast cell dysfunction with a lower threshold for cytoplasmic degranulation of anaphylactic mediators induced by external physical factors. The triggering physical factors may be mechanical, thermal, related to exercise, to sun exposure or to contact with water. These disorders can be reproduced by changes in temperature or by direct skin stimuli.

- **THERMAL CHANGES (HEAT / COLD)**
- **SKIN TRAUMA (DERMATOGRAPHISM)**
- **PRESSURE (DELAYED URTICARIA / ANGIOEDEMA / DERMATOGRAPHISM)**
- **VIBRATION (ACQUIRED / FAMILIAL)**
- **SOLAR (TYPES I - VI)**
- **AQUAGENIC**
- **EXERCISES**

#### **COLD URTICARIAS**

- **ACQUIRED**
  1. **PRIMARY / IDIOPATHIC**
  2. **SECONDARY (CRYOPROTEINS)**
  3. **ATYPICAL**
- **FAMILIAL COLD AUTOINFLAMMATORY SYNDROME**
- **EXERCISE-INDUCED ANAPHYLAXIS**

- **FOOD INDEPENDENT (IDIOPATHIC / PRIMARY)**

- **IgE MEDIATED FOOD DEPENDENT**
- **NON IgE MEDIATED FOOD DEPENDENT**
- **DRUG DEPENDENT**

#### **CHOLINERGIC URTICARIA**

1. **CLASSICAL / HEAT-INDUCED**
  2. **COLD-DEPENDENT VARIANT**
- TREATMENT OF DELAYED PRESURE URTICARIA AND ANGIOEDEMA**

- **NO RESPONSE TO ANTI-H1**
- **GOOD RESPONSE TO STEROIDS**
- **DAPSONE**

- *Geller M. AN ACAD NAC MED 1995; 155 (2):97-8*

- *Medeiros M Jr. Abstract EAACI 2006 (82% benefit)*

- *Grundmann SA et al. J Dtsch Dermatol Ges Jul 20, 2011 (74% benefit)*

- **(?) CYCLOSPORINE A (Kaplan A)**
- **ANTI-TNF- $\alpha$  (CASE REPORT) JACI 2007; 119:752-4**
- **OMALIZUMAB (CASE REPORT) ALLERGY 2010; 65 (1):138-9**
- **IL-1-RECEPTOR ANTAGONIST ANAKINRA (2 CASES) ANN INTERN MED 2012; 157(8):599-600**

In physical urticarias, it is essential to make a precise diagnosis, identify the clinical expression, triggering and aggravating factors, choose a tailored pharmacotherapy combined with a prevention plan, and when possible, with a well successful induction of physical tolerance (physical desensitization).